

WHAT IS CLAIMED IS:

1. A method of inhibiting activation of CTL and NK cells, said method comprising:  
combining said cells with an activation inhibiting  
5 amount of a compound comprising an oligopeptide of at least 6 amino acids comprising a contiguous sequence of the HLA-B  $\alpha_1$  domain or species analog thereof, wherein amino acids 84 to 86 are YYW;  
whereby activation of said cells is inhibited.
- 10 2. A method according to Claim 1, wherein said oligopeptide is of at least 8 amino acids and amino acids 83 to 86 are RYYW.
3. A method according to Claim 2 wherein said oligopeptide comprises at least a total of 6 contiguous amino acids from  
15 said HLA-B  $\alpha_1$  domain joined to said tetrad.
4. A method according to Claim 1, wherein said compound is a dimer of said oligopeptide.
5. A method according to Claim 1, wherein at least one of said amino acids is a D-stereoisomer.
- 20 6. A method according to Claim 1, wherein said combining is in the presence of a viable solid organ or viable second cells other than CTL and NK cells.
7. A method of inhibiting activation of CTL and NK cells, said method comprising:  
25 combining said cells with an activation inhibiting amount of a compound comprising an oligopeptide of at least 6 amino acids, including the triad YYW and comprising a contiguous sequence of the sequence:  
aa<sup>70</sup> aa<sup>71</sup> Q aa<sup>73</sup> aa<sup>74</sup> R aa<sup>76</sup> aa<sup>77</sup> L aa<sup>79</sup> aa<sup>80</sup> aa<sup>81</sup> aa<sup>82</sup> aa<sup>83</sup> Y Y W aa<sup>87</sup>  
30 aa<sup>88</sup> aa<sup>89</sup> aa<sup>90</sup> aa<sup>91</sup>.

wherein:

- aa<sup>70</sup> is Q, H, S, N or K;  
aa<sup>71</sup> is an aliphatic neutral amino acid;  
aa<sup>73</sup> is T or A;  
5 aa<sup>74</sup> is Y or H;  
aa<sup>76</sup> is aliphatic neutral amino acid;  
aa<sup>77</sup> is S or N;  
aa<sup>79</sup> is R or G;  
aa<sup>80</sup> is T, I, N or an aromatic amino acid;  
10 aa<sup>81</sup> is an aliphatic non-polar amino acid;  
aa<sup>82</sup> is R, L or an aromatic amino acid;  
aa<sup>83</sup> is G or R;  
aa<sup>87</sup> is any amino acid;  
aa<sup>88</sup> is an aromatic amino acid or aliphatic amino  
15 acid of from 5 to 6 carbon atoms;  
aa<sup>89</sup> is is any amino acid;  
aa<sup>90</sup> is any amino acid; and  
aa<sup>91</sup> is any amino acid;

whereby activation of said cells is inhibited.

- 20 8. A method according to Claim 7, wherein said oligopeptide is of at least 8 amino acids, is the dimer thereof, or at least one of the amino acids is the D-stereoisomer and is of the formula:

R V/E N/D L R I A/L L R/E Y Y W Q/D S

- 25 wherein the backslashes intend that either amino acid may be present at that position.

9. A method according to Claim 7, wherein said combining is in the presence of a viable solid organ or cells other than CTL or NK cells.

- 30 10. In a method for transplanting a donor mammalian organ or cells other than as part of a viable organ to a mammalian recipient, which method comprises:

isolating said donor organ or cells from said donor and implanting said donor organ or cells in said recipient, the improvement which comprises at least one of the following steps:

5 (a) combining said organ or cells prior to implanting in said mammalian recipient with an activation inhibiting amount of a compound comprising an oligopeptide of at least 6 amino acids comprising a contiguous sequence of the HLA-B  $\alpha_1$  domain or species analog thereof, wherein  
10 amino acids 84 to 86 are YYW; or

(b) administering to said mammalian recipient in a period extending from prior to subsequent to implanting said donor organ or cells an activation inhibiting amount of a compound comprising an oligopeptide of at least 6  
15 amino acids comprising a contiguous sequence of the HLA-B  $\alpha_1$  domain or species analog thereof, wherein amino acids 84 to 86 are YYW.

11. A method according to Claim 10, wherein said compound is of the formula:

20 R V/E N/D L R I A/L L R/E Y Y W Q/D S

wherein the backslashes intend that either amino acid may be present at that position.

12. A method according to Claim 11, wherein said compound is a peptide of not more than 20 amino acids and comprises  
25 the amino acid sequence N L R I A L R Y Y W.

13. A compound comprising an oligopeptide of at least 6 amino acids comprising a contiguous sequence of the HLA-B  $\alpha_1$  domain or species analog thereof, wherein amino acids 84 to 86 are YYW.

30 14. A compound comprising an oligopeptide of at least 8 amino acids comprising the triad YYW and comprising a contiguous sequence of the sequence:

aa<sup>70</sup> aa<sup>71</sup> Q T aa<sup>74</sup> R aa<sup>76</sup> aa<sup>77</sup> L aa<sup>79</sup> aa<sup>80</sup> aa<sup>81</sup> aa<sup>82</sup> aa<sup>83</sup> Y Y W aa<sup>87</sup>  
aa<sup>88</sup> aa<sup>89</sup> aa<sup>90</sup> aa<sup>91</sup>.

wherein:

- 5 aa<sup>70</sup> is Q, H, S, N or K;  
aa<sup>71</sup> is an aliphatic neutral amino acid;  
aa<sup>74</sup> is D, Y or H;  
aa<sup>76</sup> is E or V;  
aa<sup>77</sup> is D, S or N;  
aa<sup>79</sup> is R or G;
- 10 aa<sup>80</sup> is T, I, N or an aromatic amino acid;  
aa<sup>81</sup> is an aliphatic non-polar amino acid;  
aa<sup>82</sup> is R, L or an aromatic amino acid;  
aa<sup>83</sup> is G or R;  
aa<sup>87</sup> is any amino acid;
- 15 aa<sup>88</sup> is an aromatic amino acid or aliphatic amino  
acid of from 5 to 6 carbon atoms;  
aa<sup>89</sup> is is any amino acid;  
aa<sup>90</sup> is any amino acid; and  
aa<sup>91</sup> is any amino acid;
- 20 the dimer or at least one amino acid being the D-  
stereoisomer.
15. A compound according to Claim 14, wherein said  
compound is of the formula:
- 25 R V/E N/D L R I A/L L R/E Y Y W Q/D S  
wherein the backslashes intend that either amino acid  
may be present at that position.
16. A compound according to Claim 15 of at least 10 amino  
acids including the sequence N L R I A L R Y Y W.
17. A compound comprising at least two oligopeptides  
30 according to Claim 14 joined at their C terminus to a  
polylysine.